

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 11, as follows:

A conventional corrugated fin cutting device is disclosed in Japanese Patent Laid-open No. Tokkaihei 5-23912. This corrugated fin cutting device utilizes counting worms constituted of a pair of worms twisted in the right and left directions engaging respectively with both shoulder portions of the corrugated fin material and conveying the fin material in a conveying direction while counting the number of ridges of the fin material.

Please amend the paragraph beginning at page 1, line 18, as follows:

Further, another conventional corrugated fin cutting device is disclosed in Japanese Patent Laid-open No. Tokkai 2002-109509. In this corrugated fin cutting device, the aforementioned both worms convey the fin material by a predetermined number of ridges and then stops it, and movable cutting blades mounted on the tips of ~~the~~ both of the worms are quickly brought down to cut the fin material, to thereby obtain a corrugated fin having a predetermined length.

Please amend the paragraph beginning at page 1, line 26, as follows:

However, in the conventional corrugated fin cutting devices, since ~~the~~ both of the worms repeat conveying and stopping of the fin material, there exists a problem that the fin material may expand or contract so as to heavily contact the both of the worms, thereby damaging or twisting the fin material and to be damaged or twisted, thereby causing a cutting defect.

Please amend the paragraph beginning at page 1, line 31, as follows:

Incidentally, when such a problem occurs, it is possible that end portions of the corrugated fins become ~~becomes~~ irregular when they are assembled with a core to cause an appearance defect, or to cause a defect on a joint condition between a sheet plate of a radiator or the like and a tube.

Please amend the paragraph beginning at page 4, line 15, as follows:

A corrugated fin cutting method according to the present invention comprises: a position restraining step of restraining by a position restraining unit a position of a bottom portion of a corrugated fin material that is being continuously conveyed in a conveying direction; a position determining step of determining a position of the bottom portion of the restrained fin material by a guide piece approaching the bottom portion, and then moving the guide piece in synchronization ~~synchronizing~~ with the fin material in the conveying direction; and a cutting step of moving cutting blades with the guide piece in the conveying direction, and cutting by the cutting unit the bottom portion of the fin material at the position determined by the guide piece.

Please amend the paragraph beginning at page 5, line 1, as follows:

In the subsequent cutting step, the cutting unit is ~~are~~ moved with the guide piece in the conveying direction, and cuts the bottom portion of the fin material at the position determined by the guide piece.

Please amend the paragraph beginning at page 5, line 17, as follows:

Thus, since the cutting unit cuts the bottom portion of the fin material after the guide piece passes the position restraining unit in the cutting step, it is possible to assure the size of

engagement with the fin material by which the position restraining unit can surely restrain the position of the fin material, and at the time of cutting, the cutting blades can surely cut the bottom portion of the fin material without interfering with the position restraining unit.

Please amend the paragraph beginning at page 6, line 4, as follows:

FIG. 4 is a view describing an operation of the corrugated fin cutting device, which is cross-sectionally shown along a line S4 to S4 in FIG. 2, before the guide piece moves down to a bottom portion of the fin material;

Please amend the paragraph beginning at page 6, line 22, as follows:

FIG. 1 is a side view of the corrugated fin cutting device according to the embodiment of the present invention, and FIG. 2 is a plan view showing a positional relationship between worms and fin material in the corrugated fin cutting device according to this embodiment. FIG. 3 is a perspective view of movable cutting blades and its guide, and FIG. 4 to FIG. 6 are views respectively describing an operation of the corrugated fin cutting device along a line S4 to S4 in FIG. 2.

Please amend the paragraph beginning at page 6, line 30, as follows:

As shown in FIG. 1 and FIG. 2, the corrugated fin cutting device according to this embodiment is mainly constituted by a pair of worms 1 that convey a corrugated fin material 10 made of a metal sheet and determine a position of a bottom portion 10b of the fin material 10, a guide piece 2, and movable cutting blades 3 that cut the fin material 10 at a position of the guide piece 2. Note that the worms 1, the guide piece 2, and the cutting blades 3 function as a position

restraining unit of the present invention, a positioning unit of the present invention, and a cutting unit of the present invention respectively.

Please amend the paragraph beginning at page 7, line 7, as follows:

The worms 1 continuously convey the fin material 10 on a conveying table 6 in a conveying direction, which is the direction of an arrow P in FIG. 1, by rotating of the worms in rotational directions opposite to each other, which are the rotational directions shown by arrows Sa and Sb in FIG. 2. The worms 1 are constituted by a worm 1a with right-hand teeth and a worm 1b with left-hand teeth that restrain the position of the bottom portion of the fin material 10 while conveying the fin material 10. Both ~~The both~~ of these worms 1a and 1b engage respectively with both shoulder portions 10a of the fin material 10, which are set to have the same pitch as that of a corrugated fin to be manufactured, in order to restrain the position of the bottom portion 10b of fin material 10.

Please amend the paragraph beginning at page 7, line 19, as follows:

Further, the worms 1a and 1b are coupled by a gear, not shown₂, and is driven by a servomotor, not shown to rotate respectively. A control unit, not shown₂, can count the number of bottom portions 10b of the conveyed fin material 10 from the number of rotation of at least one of these worms 1a and 1b.

Please amend the paragraph beginning at page 7, line 24, as follows:

As shown in FIG. 3, the guide piece 2 is for guiding a movable cutting blade 4 arranged above the fin material 10 to a cutting position of the fin material 10, and its downside portion is formed in curves to avoid the ~~both~~ worms 1a and 1b, and a tip thereof is formed to have a thickness and a width capable of approaching the bottom portion 10b of the fin material 10 between the worm 1a and the worm 1b.

Please amend the paragraph beginning at page 8, line 4, as follows:

The movable cutting blade 4 is used for cutting the fin material 10 by moving down along the guide piece 2, and has, as shown in FIG. 3, a blade portion 4a that is formed on its downside, and reinforcing portions 4b and 4b that are formed thicker than the blade portion 4a and arranged at ~~the~~ both sides of the blade portion 4a.

Please amend the paragraph beginning at page 8, line 10, as follows:

Furthermore, the guide piece 2 and the cutting blades 3 are mounted on a traveling carriage, not shown, and provided on the conveying table 6 to be movable in a conveying direction of the fin material 10 by a cam, not shown, linked to the traveling carriage, and is controlled to be movable in synchronization with the fin material 10 conveyed according to the rotations of the ~~both~~ worms 1a and 1b. Incidentally, fin guides 7 that guide ~~the~~ both sides of the fin material 10 are provided.

Please amend the paragraph beginning at page 9, line 5, as follows:

At this time, since the worms 1 are restraining the position of the bottom portion 10b of fin material 10 by engaging with ~~the~~ both shoulder portions 10a of the fin material 10, the guide

piece 2 surely approaches the bottom portion 10b of the fin material 10.

Please amend the paragraph beginning at page 9, line 10, as follows:

When the position determination by the guide piece 2 is completed, the control unit resets the counted number of ridges of the worms 1, and starts ~~new~~ counting from a bottom portion that is more upstream ~~side~~ by one from the bottom portion 10b.

Please amend the paragraph beginning at page 9, line 15, as follows:

On the other hand, the guide piece 2 that has approached the bottom portion 10b of the fin material 10 moves in the conveying direction in synchronization with the fin material 10. At this time, the cutting blades 3 move ~~moves~~ with the guide piece 2 in the conveying direction.

Please amend the paragraph beginning at page 11, line 1, as follows:

The cutting unit may be constructed so that it moves at first independently from the guide ~~piece~~ ~~peace~~ 2, not moving together with the guide piece 2, to the guide ~~piece~~ ~~peace~~ 2 and then ~~move~~ moves with the guide piece 2 ~~peace2~~ while cutting the bottom portion 10b, determined by the guide piece ~~peace~~ 2, of fin material 10.